

Response
to
Hooks Analysis of Staudinger/Rubin Recommendations
Forwarded to the
Biosolids Expert Panel
October 21, 2008

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Expert Panel Members

The Expert Biosolids Panel was established by the General Assembly to provide information on biosolids issues. However, the General Assembly provided no funding or other resources to enable the Panel to carry out its mandate. During initial meetings of the Panel a number of citizens made impassionate pleas for help in redressing the health problems they experienced following exposure to biosolids, affording this Panel the opportunity to address those health concerns.

An Analysis of the Staudinger/Rubin Recommendations prepared by an industry representative dated October 14, 2008, was mailed to Panel Members. Contrary to statements in the Analysis, the recommendations do not necessarily reflect the views of Staudinger or Rubin. Instead, they represent recommendations that both believed the Panel could include as consensus recommendations to the General Assembly. In that context we ask Panel Members to consider the following as they evaluate whether to support those recommendations:

1. Statutory and Regulatory Provisions Must be Developed to Assure that Medical Professionals Investigate and Identify Vulnerable Individuals.

The author asked the Panel to base any recommendations regarding exposure of vulnerable individuals to biosolids constituents on published literature, which he says has shown the existence of low level health risks when biosolids are properly applied. Although those studies confirm the possible association of citizens' health complaints with their exposure to biosolids, the lack of information as to the constituents present in the biosolids that citizens are exposed to makes it impossible to identify and protect vulnerable individuals on the basis of the limited literature available.

Staudinger/Rubin recommended that medical professionals evaluate the individuals' medical conditions in the context of the potential constituents they could be exposed to; and determine whether exposure to biosolids should be precluded as a result of specific medical conditions. The recent list of medical conditions that should preclude exposure provided to DEQ by VDH is an important part of that recommendation. That list should be completed and expanded further

to include individuals who become ill following exposure to biosolids when their medical condition indicates that they should be protected from further exposure.

The author argues that medical professionals should not make these decisions as they are not qualified. However, it is submitted that there is no one better qualified or better suited to make that determination. Indeed, the opinion of medical professionals may be the most objective way of addressing this issue at this time.

The author also argues that citizens' complaints should not be considered because they "empower individuals who believe they have become ill" to delay, severely restrict or stop land application". However, under the Staudinger/Rubin recommendations, the personal beliefs of those individuals do not determine whether they are protected. Rather that decision will be made by qualified medical personnel.

It now falls to the Panel to determine who is willing to recommend that vulnerable individuals be afforded protection, and whether there will be consensus support therefore.

2. Statutory and Regulatory Provisions Must be Developed to Avoid Exposing Odor and Health Sensitive Individuals (vulnerable individuals) to biosolids.

Based on the health complaints and the lack of regulatory provisions to protect human health, Staudinger/Rubin recommended that adequate regulatory provisions be put in place to protect vulnerable individuals. However, they also recognized that it would be difficult for the Panel to identify adequate standards to accomplish this. Thus to begin a dialogue with other Panel Members, two specific examples were included in the recommendations.

The first was to extend the minimum buffer of 400 ft established by VDH for odor sensitive receptors to all vulnerable individuals. The second was to require incorporation of biosolids within one half mile of odor sensitive receptors, and to clearly include vulnerable individuals. Although the author objected to these recommendations, he made no effort to indicate whether they might have more than a minor impact on land application operations. Nor did he provide any documentation to support his conclusion that requiring that same buffer to protect health would not provide some relief.

Based on citizens' complaints Staudinger/Rubin recognized that the 400 feet was offered as a minimum buffer. Thus they recommended that site-specific standards be developed to afford adequate protection for the most vulnerable. The difficulty in developing adequate aerosols buffers was recognized in the absence of better biosolids' constituent information.

Specific recommendations were made, with the expectation that the biosolids industry would consider and make meaningful alternate recommendations to make it easier for them to operate as they addressed the underlying health issue. That never happened. Nor did the author suggest different regulatory provisions. Thus the Staudinger/Rubin recommendations are the only human health related recommendations before this Panel.

The author incorrectly states that Staudinger/Rubin's recommended regulatory provision of mandatory biosolids incorporation designed to protect human health would increase the risk to the Chesapeake Bay by precluding application on no-till sites. In effect the author argues that protection of the Bay is more important than protecting human health. However, the Panel is not faced with such a choice as the recommendations do not preclude applications on no-till sites.

Finally, the author argues that use of the phrase "odor sensitive receptor" would "increase frivolous claims and create permitting gridlock". However, this phrase is already in the biosolids regulations, and the author's imagined parade of horrors has not occurred. A proffered definition of "odor sensitive receptor" could have eliminated any real concern.

It now falls to the Panel to determine who is willing to recommend that adequate regulatory provisions be implemented to protect vulnerable individuals, and whether there will be consensus support for the recommendation.

3. Statutory and Regulatory Provisions Must be Developed to Assure that DEQ has Adequate Medical Professionals to Address Health Complaints.

The author argues that no evidence was presented to the Panel documenting the "failure of the Virginia Department of Health (VDH) to address health concerns and complaints." However, this failure was not only pointed out by citizens who spoke to the Panel but also by other submitted documentation, including the inaction of VDH following transfer of authority to DEQ. Moreover, the General Assembly has long been aware of that failure as a result of complaints by citizens whose health had been impacted.

It now falls to the Panel to determine who is willing to recommend that adequate resources be made available to ensure that health complaints are investigated and addressed, and whether there will be consensus support for the recommendation.

4. Statutory and Regulatory Provisions should provide a Local Government Enforcement Option.

The author does not object *per se* to empowering local governments to enforce biosolids regulations when there are persistent violations. Instead, he attempts to question the existence of persistent violations. However, the example cited by the author fails to support his position.

12 VAC 50-585-550(A) clearly provides that "**the applied nitrogen and phosphorous content of biosolids shall be limited to amounts established to support crop growth.**" The author argues that this language is inconsistent with later language in that same section:

"Nitrate nitrogen developed as a result of biosolids application shall be controlled in order not to accumulate in groundwater as a pollutant. **Thus, the amount of biosolids applied to land shall be restricted based on the nitrogen requirements of the crop grown on the amended site immediately following application (agronomic rate).**" [Emphasis added by Hooks.]

However, there is no inconsistency. The language cited by the author simply makes clear that the “crop” referred to in the language cited by Staudinger was to be the crop grown on the site immediately following a biosolids application. Thus it is clear that there is no inconsistency. Accordingly, it remains a question of enforcing the cited language that limits biosolids applications to the more restrictive N or P agronomic rate.

It now falls to the Panel to determine who is willing to recommend a local government enforcement option for the Commonwealth’s Biosolids requirements, and whether there will be consensus support for the recommendation.

5. Statutory and Regulatory Provisions Should Assure Exclusion of Pollution Sensitive Sites

EPA left that responsibility of eliminating pollution sensitive sites to the States when biosolids were land applied. Indeed, a number of such sites have been excluded under current State of Virginia biosolids regulations. Staudinger/Rubin recommended that a greater effort be made to identify, and exclude such sites from biosolids permits.

The author does not argue that pollution sensitive sites should not be excluded from biosolids permits. Instead, he suggests that pollution sensitive sites have already been identified. However, the Panel has been provided with a number of examples of sites that have not yet been evaluated, including by way of example, sites with slopes in excess of 6 percent, when EPA’s risk assessment assumed slopes would not exceed 6 percent.

It now falls to the Panel to determine who is willing to recommend that pollution sensitive sites be better identified, and once identified, be restricted from biosolids application, and whether there will be consensus support for the recommendation.